



Mod-0037.ST25.txt  
SEQUENCE LISTING

<110> Jarrell, Kevin A.  
Vishwanath, Prashanth  
Smith, Temple  
Short, Glenn F.

<120> Alien Sequences

<130> 2003320-0036

<140> 10/763,039

<141> 2004-01-22

<160> 166

<170> PatentIn version 3.2

<210> 1

<211> 174

<212> DNA

<213> Alien to Mouse cDNA

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cgagccaaga ttctggattc gatcagtggc acttggaaac tccatctcg caaggagttc 240

cgcctcattt tttgtatgtc gcatgctgg aaccggcgcc atgcagctga tttgaaccgg 300

tggaaatggaa agggcaagag ggcaggctgg agaggggccc ccgtcttt tgctccatg 360

caggtgacgc gcaagtgtgc accagacccc acagagcagt caggcctctt cgataactct 420

ttcctggatc actaccagag tctggctgc atttacctag gctcccttgc ccgaaaggc 480

tcttctctga ccaaggatgg aaaggtggat tttcagggcc cttgccttcg tggtggccag 540

aattattcga acttttctca gagtcagcg tggtaaaac cgctggacga ccaggaacag 600

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<212> DNA

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<213> Alien to Mouse cDNA

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ccagggaatg cttctggag acagagcaga tgacaatacc agtgaccaca cgatagtctg 180  
ctacacccccc atgatccccccc cccacgcccag gatgcctgga agtaggtag 229

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<211> 174

<212> DNA

<213> Alien to Mouse cDNA

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tcgtctttgc cttcagcttc tcctcatgtat tccaagagat gtccgcgcgc taagatcgct 120  
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<210> 5

<211> 306

<212> DNA

<213> Alien to Mouse cDNA

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atgaatggct accagaagca tttggttcca cttcgcgttc aaatgtggga gatggcaatg 180  
cgacttaatg gaacccagcc aaatgaattc cacccggcag tccagcagtg catcctggct 240  
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<213> Alien to Mouse cDNA

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<212> DNA

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| tccgcgtacc  | gctcagcctc          | tctcaattct  | agccctgccca | cgcttgcctcc | ggcttctct  | 120 |
| gcctgcccct  | gctaa               |             |             |             |            | 135 |
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| <210>       | 8                   |             |             |             |            |     |
| <211>       | 144                 |             |             |             |            |     |
| <212>       | DNA                 |             |             |             |            |     |
| <213>       | Alien to Mouse cDNA |             |             |             |            |     |
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| gccctggtga  | aagatcttcc          | catgaacgcc  | agcgttgcct  | catactttat  | agaaaggggg | 120 |
| agcatcagct  | ggcatttctc          | atga        |             |             |            | 144 |
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| <212>       | DNA                 |             |             |             |            |     |
| <213>       | Alien to Mouse cDNA |             |             |             |            |     |
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| cgagtgagcc  | tgaaacccga          | gccgggccta  | gcgctggtt   | tacaccaggg  | cttgaccaa  | 120 |
| acagtcacag  | aatgtctaag          | cttcacagga  | aagccatgt   | attag       |            | 165 |
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| <212>       | DNA                 |             |             |             |            |     |
| <213>       | Alien to Mouse cDNA |             |             |             |            |     |
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| gcgatgtcca  | caggcttcga          | agtaatcgag  | tcgccgtgca  | agatctgcat  | gccaaagctt | 120 |
| ggaggtaaaa  | caactgcgga          | tggcaaactc  | acttccgtga  | ctcagggcat  | gaaacactgg | 180 |
| tctctcacca  | gagctagtcc          | cccggaccag  | tcgcaaaagg  | gccgacccta  | caggagcacf | 240 |
| gtgcaagggg  | agattgaagc          | gggacagccc  | ccacatgaaa  | tctccctcga  | ctggtacccc | 300 |
| atgttcaaga  | tggaaacaga          | cagcccgatt  | aagaatgttc  | cccaggcaca  | catgggggag | 360 |
| ttcgggcact  | gcgacaatct          | ccccaaatggc | aacacagtga  | gcaacccgga  | gcctaggag  | 420 |
| aatggaaatg  | tggcgccggg          | agtgggctta  | gacggacagg  | aagaaatggg  | ctggctttgg | 480 |
| ccgggttcgtc | cttcttgtat          | gaactatttc  | ttttaagcat  | ccactctctc  | cttttggatg | 540 |
| ggctttcttg  | agcgccgcta          | g           |             |             |            | 561 |
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| <211>       | 480                 |             |             |             |            |     |
| <212>       | DNA                 |             |             |             |            |     |

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<213> Alien to Mouse cDNA

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gccaaggatc tcccgtgtga gtcaggactt gctgtgagag acctgagcaa caggacacag 180  
aacagtctag ctatgtttt ggcttcacgg gggatcaaag accctgaaat gaagatgaat 240  
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tctcaatggg aactcccact cgtggcttac atgagcttt tctgtccctt ccgtgcgggc 360  
gaccggggtt cgatccataa tcatctctcc acggtcagag cgaagattga ctactgtggt 420  
cagcggtgca gtgcctcaga tccaaggagg ggccctcagg actattctca aatgctctga 480

<210> 12

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<212> DNA

<213> Alien to Mouse cDNA

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ctgggcctgt ttggttgcca cctgggtact ggagggtacc gaacattcat gatctacatc 180  
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<210> 13

<211> 426

<212> DNA

<213> Alien to Mouse cDNA

<400> 13

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ggctacagcg gcttcttaag tggcccccacg gatttctct ctatggagt gtcatgtcac 180  
ctagcacagg aatcatttcg gttccactg caggatgatt gcctcctgac caagatgcac 240  
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cctcagcaga ttgcgaagaa aaaatcatcg ttttagttctt ggggttcatc ggagaactct 360  
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<211> 192

<212> DNA

<213> Alien to Mouse cDNA

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gagggagatg tatcggtact gctggaacag tttcggcacc agactgaaca gctccggccc 180  
atgagctact ttttggacaa gccaaagctg ttttcgttcc aggaagagcc acggctgtgg 240  
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ctggcatttg aaggccagtc tcagaaattt tag 153

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gtggtggtgt ggctgtctgc cttcatgtac cgatcccgca agaaactgac gagccgcttc 180  
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<212> DNA  
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gatttgcgtg agagctccct ctgggtgacg atctcttttgc acacggcgaa tctgtcttat 660  
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<213> Alien to Mouse cDNA

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gcggagcagt ctcgtaaaggta aagcgtgtgc tcctcgcagt tttactccca gaccatcttgc 180

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| atgatggcag cgggcaagtg ccagcctgtg aacgacccca cctcttgctc ttatgaagct | 300 |
| tacctaaggc ccatctggaa tggtatgagc tttcttgatt ggctgatctt tgtccccatg | 360 |
| aaccttggtg gacacagaca cagcacctcc ctgagcgcga acaaggtcac gtccatttac | 420 |
| aaggaatatg caggctattc cacctgctcg tctaccagag gctga                 | 465 |

<210> 21  
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| accctcagac actacctaataa tgtggcccta cacaagtctg ccctcctggg agatctggcc            | 120 |
| tggcggcggaa actcggcagg gggccagggc tttatgactc tagggccaaa agagattctg             | 180 |
| ccagctcagg tggcccccagg tggagagttt ggatga                                       | 216 |

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| attttgtggc aggggatcaa tctaacgatg cgacaggtga gtgccaatgg gacgcccattg             | 180 |
| gtgaactggg gggtgctgaa gccaccact caccagattc tcaatggtga cacagactgt               | 240 |
| ctgtgccgcc cgaggtcatt tggttgaag gccaatcagg cccggcggacc gaagaagttac             | 300 |
| caaggctgcc ttcacggag gtgctctgct gacttcctct gttccatgg ggctgttgtta               | 360 |
| agagatcagt gctcgatgat tcaagtgtct ttgagcaccc ggctgcccgtt ctctaattcc             | 420 |
| tggattcagg tcgctgtcat gaagttcttt tgttacagaa ccaaggccctg cgcatgtaat             | 480 |
| ggggggggta aaaaagccct atctgtgagt tggcaaaaat tccagaacctt gtacgtgaca             | 540 |
| cggaaagcaa tcctagttt cagcatagct aacaagggtt ccctgactaa gataaacatc               | 600 |
| cagcggaaaga agctcagtaa cagggactca gtgacagagt gcgtttcgg actaacctat              | 660 |
| aggagctttc taggtaaacg ccatgtattc gaaggagcct cactcttgac gaacggaccc              | 720 |
| aacccagggaa ggagcaagtg gccctgtgaa acaataagcg atcagtatta ctgtttcaac             | 780 |
| aggaagttgt ctgagagcgg catgtgcttc atgttgtgtta gtacctgcag agggtacctg             | 840 |
| ccgcccggact acctgtttgc agctctgctc aagacagtca gccggcacat cgtaaaagtc             | 900 |

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| attccccacg agcacaataa gacgcctgag ctggaggaac ttccgcctat caacagctgt  | 1020 |
| accaggattt ccagtgcctt ttgcagccgc tcctcagtga aaaccaagga cagtacgacg  | 1080 |
| gcacctgttc tggttttttt tttccctttaga ctgtttgctg aggaaatccg gctgcgtct | 1140 |
| tttgaacggg agtaccgcaa agattcttac aagtacctgc gggtgtga               | 1188 |

<210> 23  
<211> 126  
<212> DNA  
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| gcctgaa  | 126 |

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| ccccgggatc ccaccttaaa ggaggggacc aagaagggcc agctaagggc atccccgtac            | 120 |
| ttccttcgtg caatgcgtc cttcccccac gtcaacacac cccaccagca gttctaccac             | 180 |
| cgtcagcggg ccagctttca ggactacgcg ggagatatgg cctacatcga actttcagt             | 240 |
| cagatcagtc ctactgcgc aagagcacta cagatgccaa tcaaccctgc gaacgcgggc             | 300 |
| gcggtatcca tggggaaatc tttcccttc tccatgcttt tgcctcgcaa ctccgttta              | 360 |
| cccccaacca agcgccccgtt ccaaagactt tccattccgc aatctctgac cagcaagggc           | 420 |
| cactacctga gcctgtatct gctggaaagga gaaatcttag caggaaccat ctccaccgt            | 480 |
| gcggtgttga ccaaatggac atctcagttc tacatgtgtg tgctggctgt ctttacgg              | 540 |
| caacacgcac cttcccccac tcagagggct gttgagggtt accggaaatc ccaatccaag            | 600 |
| cccccaaaagg ttcagggaaat gtggcgagac gggattaaat tcacgtctgg taaactccct          | 660 |
| tcctgttgtg aggggcaccg catgccttt gactggctt tcccaaccag gttcatacag              | 720 |
| attggacgtc cggggggagta cattgcagaa tgcttccagc ggtcccgag aaaggctaac            | 780 |
| ttcctgaacg ttgacataaa cagctgtctg cgcaagagca ttgaaacttt ttttggaga             | 840 |
| aactatatgc acccgccgcg cgaccgcctc ttttcaggg tgagtatccc ttgctgtat              | 900 |
| ttggcactag agggaccctt ctgtgaatac cccaaattcc ttcacgct                         | 948 |

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<210> 25

<211> 273

<212> DNA

<213> Alien to Mouse cDNA

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agatccggc tcaatgactg tagaggccct ttatgcagaa aggacaaaa ggctgagcgc 180

gacagccagc ttggcaagcg ggtgcactat gcattgatcc ttcggttcaa tcggccaaat 240

gcmcctgaca gccaggacta ttgcctaact tga 273

<210> 26

<211> 198

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cctgttcctt cttgtcacat gcactacttc gacgggtccc tgggtgtcg gctgacctgt 120

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ggcaccatcc taagtttag 198

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<212> DNA

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tcggacccctcg ctgctgttca acagccggcg cgccgtgagt ttcaaggca cccttcaccc 180

tctcaacgc tggggcact cctgggtgca tgggtggcgat gatctggcat cctggactcc 240

ggggccctgc gtgaaatgga gctgggcattc cagggtacca tacgattctg gctacctact 300

Mod-0037.ST25.txt

|  |                                  |     |
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| gcgcgctcgc ggagttgctt gctctgccga           | tgcctggggg ctgagatcca ggctctcaag | 360 |
| ggcaacaacc agaactcatt ctatcgtag            | ctcttccgcc aagcttcgta ccgttatctg | 420 |
| agatgttagtt tggcgtaccc atcgatgggt          | gacttcttgc cattgcagcg cggaagtgg  | 480 |
| gttctcctgg gcagagggaa gcctccaggg           | caagctcgag ctctgaagcg cacagggat  | 540 |
| ggcaaggggc aggctcgatt aagaacaagt           | caacttggtc attccctggg agagtatgt  | 600 |
| caggtttcc ctttctatcc agaggaccta atgctgagta | aagaccagga agacagccaa            | 660 |
| cagagagtga actag                           |                                  | 675 |

<210> 29  
<211> 609  
<212> DNA  
<213> Alien to Mouse cDNA

|   |     |
|---|-----|
| <400> 29  |     |
| atgtcaagt aaacttcacc ccgcctgatc cctaagtctt ggagtagagg ggcgcagcgaa   | 60  |
| atttcaatcc cttccatcat tgccctgggt gagctgctt cccgttggag gctagttct     | 120 |
| ctctccattt gcaaacgtct tatgcatcct ctgcgccaga catacatgcg aatttttcca   | 180 |
| cgaaccttta ttgtcagtaa gatcccgtat ggcatggaga tcatacgtaa caagtggat    | 240 |
| gtggctaattt gaactcccgaa gccaagagg ttctgcctga caaccagtca atggctgagc  | 300 |
| ctttacatga tttccccatg cacatcatac tgcagactcc ggcgcattcgc aatgcgcgaa  | 360 |
| ggcaggcggc ttgaagcctg gcacggactg agcaaggctg ccaaggagat cactgcatt    | 420 |
| cggatgtatg cggagatcctt cttgtccgag ttaatgccgg tggagactta tatctgttac  | 480 |
| ttcccgaaacc tcgaagccag atgtccacga aaatccccgt tttcgctgtga tgaatggagc | 540 |
| atgataagcg taccttgat caacagtgtt ttccgcttgc gcttctcctg gcttgcctct    | 600 |
| ggcccttga   | 609 |

<210> 30  
<211> 789  
<212> DNA  
<213> Alien to Mouse cDNA

|  |     |
|--|-----|
| <400> 30   |     |
| atgttcacat tcaccagagt tgggtggcct cggcccatt ggagatccgc cgtggggAAC     | 60  |
| agtgaacgac ccctcttcat atgggcagcc ggtgccctgc ggcccaagga acctttctg     | 120 |
| tttcgggtgg aaaaaggccg ggggtggcc gagctgcgga gaaggctgag atttttacag     | 180 |
| tgtgaagcta tgtattcgaa atttctgggg atccctgaaa tggatggaaaa ctccaaggcc   | 240 |
| gtgatcgta atttttgcac caaaatcgaa cgcaggaaat gggagtcgca agcgtcaatg     | 300 |
| ctcccacacgc tgtcaaattt catgacacccg cccagtgaaa gcacgctaaag cagctcagcc | 360 |
| actttgagga tgagcctcct gtacttcgct tctgcaccca ctaacaagac aaaaattaag    | 420 |

Mod-0037.ST25.txt

|                        |                       |                       |     |
|------------------------|-----------------------|-----------------------|-----|
| ggtgtgaatt tctactcgcc  | tcccaaccac atgccccta  | agctgctaga gtgcttgaga | 480 |
| catgtgaacc gcgagtgcctt | caccaacctg ggataccttc | tggcttatat gaattgcagc | 540 |
| atggacatcc ttaaggcca   | gatttctgac gtgatggac  | cgcgtgcctc agaagtcaac | 600 |
| tcaacagaca gtactatgt   | ggtcctgtca acaggagcca | cccccaccgt ggttctcatg | 660 |
| gaaacaacat gtgcfffffc  | gtcttggagc tacctgcctg | ctctgtatga tgcaccgcgc | 720 |
| ttcacatccg aaacctacat  | ctcccttgct gaagcctgtt | atcgaagcca ggccttcag  | 780 |
| caaatgtaa              |                       |                       | 789 |

|                           |                       |                       |     |
|---------------------------|-----------------------|-----------------------|-----|
| <210> 31                  |                       |                       |     |
| <211> 258                 |                       |                       |     |
| <212> DNA                 |                       |                       |     |
| <213> Alien to Mouse cDNA |                       |                       |     |
| <400> 31                  |                       |                       |     |
| atgtacctca tggcactgaa     | tatagagcct gaagatctgg | cgggattcag caaactcact | 60  |
| atggacctgt attttgcata     | atatgcagat tccatgttgg | acaagagtcc cggcctgatc | 120 |
| gaatttctga ccgttggac      | tccgaagtgt cttctgggc  | ctcggctgag tggtagcgat | 180 |
| gcccatcggg ccagtatgc      | tcgggactat cgcccatga  | tccaacaggt gggctgggt  | 240 |
| gtcaacttgg tcacatag       |                       |                       | 258 |

|                           |                       |                       |     |
|---------------------------|-----------------------|-----------------------|-----|
| <210> 32                  |                       |                       |     |
| <211> 264                 |                       |                       |     |
| <212> DNA                 |                       |                       |     |
| <213> Alien to Mouse cDNA |                       |                       |     |
| <400> 32                  |                       |                       |     |
| atgatttccc acacaatctc     | cgagatcctc accgaagttc | agcggcagtt cttcttctg  | 60  |
| gcctgcaggg gcttcttcta     | tccgcctctc atgggtggcc | gtgaagcttc tgaaactcag | 120 |
| ggaatggaat acggcaaggg     | gtggaacacc catgtccagt | gtcgtaagtg caatgattgt | 180 |
| gtgtgtctgt tgggggaggt     | ttatgagaaa ggcataagat | acagttgcag tgtgagttac | 240 |
| agatccctgg cctacctgca     | atga                  |                       | 264 |

|                           |                       |                        |     |
|---------------------------|-----------------------|------------------------|-----|
| <210> 33                  |                       |                        |     |
| <211> 210                 |                       |                        |     |
| <212> DNA                 |                       |                        |     |
| <213> Alien to Mouse cDNA |                       |                        |     |
| <400> 33                  |                       |                        |     |
| atggaaccta tgtctgcatt     | accactcgag agcgcattga | atgacaaaaaa gttcagtacc | 60  |
| aagacgggggt tgccaagcgg    | acttaaattt ggagaggttg | ctccagcccg agcccccaat  | 120 |
| ggcttgcata ggaaagcttc     | caccaggttc caacagacgg | acgttcgtgg caaccagcag  | 180 |
| catggcttta tcatgtgca      | gatttggta             |                        | 210 |

Mod-0037.ST25.txt

<210> 34  
<211> 375  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 34  
atgcacggca tccactactc gctccccacc cagactgctg acaaaggcatt aggtgtggc 60  
atttcctccc aaggccagat tcctcaggca aatgctggca acctccctt cgccgatgag 120  
ccgggatggc agatgctcag gatgggttgt ggagaagacc agtcccggtt cacaacattt 180  
gtcttgattc gattctgtgt aatcttcgtc ggcaggtgcc aggatatgtt cctgctcaaa 240  
acaacgcccac ctgaactgcg ccagaatctc atgtgcctga agatggagtg cactagcgct 300  
ctcaagctta aggatgcgca ggtgcagctt gacctcacgc ttcccttttgc ctacgcccgc 360  
acggtgtcgg cctaa 375

<210> 35  
<211> 135  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 35  
atgtcaagct tcaactcaca gtacttcttc ttgcactgg aaccacgtg gtggttctct 60  
atgggacctg aggacattgt gatgcaccag ctccctctttt tttcaggct gtgtggagct 120  
gccagttacc ggtga 135

<210> 36  
<211> 231  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 36  
atgtgccaga gggagagacg attcacatac ccgcagatta gccactgcag ggaattctgc 60  
agaggcttca cccaaagtta agaacctgga ggacatgaca cagctgagta caaggatctg 120  
gctgaagccc tgccaatgaa gaacttcagc tgtccggtgc tggaggagag ttccctttac 180  
gcaagcgaaa tgagagctt tctcaagcag caattcgata gttggaggta g 231

<210> 37  
<211> 180  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 37  
atgtcctggg tgctcaaaca gtttaaggta atgcgagcca gacctaatt cctgatggca 60  
acttcaacac agggggatg caccaagaac tggaaatgtga ggtggaaaat atgggatctc 120  
tcaatgctgc ttgactctca taacacctct tactttaca tttgcgatcc ggtagtttag 180

Mod-0037.ST25.txt

<210> 38  
<211> 123  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 38  
atgcatttgtt cccaggtgaa actgttggag cgcttcagta atagcaaaga gacgggtgct 60  
gaagatgtgc tagaaaatgc catgccttct gaaatggcct ctacccttgg agaaagcccc 120  
tag 123

<210> 39  
<211> 147  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 39  
atggattcgc ccacgacatt cacaaagtgc acaaactgga ttttcctta ttctgtgagg 60  
gacgaccacg tgtggcttgtt atctccattc cagcagttct gcttcccctt atcctctgccc 120  
gcacctgggc cgctggcatg caattaa 147

<210> 40  
<211> 339  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 40  
atgagaaaagg atttggagtg ctcctgtcc aaaggcacat cgaatatgct gaagagtttt 60  
ctgatctgct gggggaaaggc taccctccgc ttctgcgaag aaatgcctct cacccttgag 120  
atggttcacc tctacatgga catccctgat gaacgctggc ctccctctaa ccagccattc 180  
tttggaaagt tctactcgac tttcttcagc cgccacagcc ctgggccccaa gctccaccgc 240  
cctcaggggtg caggaaggac acagctgtca gaggtcgtgg gcaacttgcg gtgggatcaa 300  
tactgttggg gcaatcctca aacgcgcagg cccagttga 339

<210> 41  
<211> 354  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 41  
atgccctgccc tgggcccaca ggaactcgcc cgcgcgagg gtgtgccagg aagtgcggat 60  
cgaggagaaga aagcggtcag gttggaagaa gccagatatc ccctgtacat ggagggtctt 120  
ggatctgaga cgcaaggggc agcaaaggat caggccccct cgttccggag cccgagaatg 180  
gccctgcccct acctaagact cggcccatc aagagagtcc ccatcatctg gcggatagtt 240  
tttcagagcc tccaccctgg cgagaagccc agggagacgt atggaaacgc ataccgggaa 300  
gaagcggcca gggcagagtt caccaagag tctgcaagcc aaagcttcac ttga 354

Mod-0037.ST25.txt

<210> 42  
<211> 267  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 42  
atgaccttca tgaacgtatg tatagccggg caagatgcaa cgcagccata ttatagggcc 60  
agttacaata gccacagtaa agttcacacc ttggaatgtc gagttgagct caaactcaca 120  
gaattaatgc gctgtgcgca tagaggaaag ggcacccgta ccacgcgctg tcttatcact 180  
gccgccttaa ttctgtgtcc ccccacctcc aaagaattcg cgtacaacaa cttgctcatt 240  
gcttcccaca ctggggcaa tgattag 267

<210> 43  
<211> 210  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 43  
atggcacccgg acaggtccac attctttac ctgtgggatc ctcaggatca ccatcaggac 60  
gcctcccta gttctccaat tgccagggtg tcacacccgt ccttccgggg ttatgactca 120  
gaggacctcg catgcagccc ccccttcag aatgcccagc ttttgtgcaa ttcgagaaac 180  
tcaactgtaa tgctgtacacct cacactgttag 210

<210> 44  
<211> 942  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 44  
atgagcgtga gggAACGTGA ggcttcagac aaatcttct ttttgtctt tgcatTTTT 60  
ttacgaagca gtttcattgg gttcatgaga cagtcttgc atagctgtgc gaaAGCACGC 120  
tgCGCAGCT tcaAGCCCCA ggaACGAATG tgtaACCAGC ggACCATGGT tgCCAACGCT 180  
ccggAAACCA ggCTGATGAC actggTTGTC cgCTTGGTGC gCCATGGCGG ttgcacaATA 240  
gtcacttctg ACCCCCgATC CCCCCAGGGT gagaAGGCC AggATCGCTA caACCTCATT 300  
cgggtGCCcC tgtACCCGGC tgcCTACATC CCCTGTTACT acatGAATGT gCTATCCATC 360  
tcaAGGGAAAC ttgagCTGCT attgagCTCA atCCAGGTTG aaATGAGACA CCCAGTGAGC 420  
aacCCGGGAC agttataCTA tatCTCTGGT caggtggatC ccggCTGTGA caggAGAAATT 480  
gccaAGTCGC CTCGGGATGA ccAGTCGGGA tctccccggc agAGAGATGC acccAGCTAC 540  
aaggTTCCA CGTTTACCG ggCTAGCAGA gCTAAGAGTA gACTAAAACG gACAGACCCC 600  
aaggAGGACCT catCCAGTCA ttccACGTG atTTTGTtta tgCTAATCTT ggACACTTCG 660  
aagtTCATGG tgaAGTCCAG ccggACTTc actCTCCTTC ttcAGGACTT ccattCAGTG 720

Mod-0037.ST25.txt

|  |     |
|--|-----|
| acacggaatc agagctccag atttcagttc aggcggaatc aggaaacagc gagatctcct  | 780 |
| ggagtggcca ctaaggagac gggagcggtt acacagatgt caccctttc tccgcagtag   | 840 |
| cgcagagtga ctgagtcgtt tttcttagtg cacggttctc tctctccacg tcggtgccctg | 900 |
| gagccctacc ctttagccca actggaggaa atccagaagt ga                     | 942 |

<210> 45  
<211> 357  
<212> DNA  
<213> Alien to Mouse cDNA

|   |     |
|---|-----|
| <400> 45<br>atgaccttacc tgtggatgaa ggcgatcagc agtcatgccca agctgccggc aaacttcacg | 60  |
| atacagtcat tctcccagtg cattcaggaa acaaccgcaa gtcctgatag agaactccctg              | 120 |
| acgatgctga agcccacaag atctcaagaa gagacggacc tactgaatag actgtggccg               | 180 |
| gataacctct cttctctgac ggagatgcca atctcccgtt gtctgtgcag aagcatccgc               | 240 |
| ccttacacct cttcagcgga ctccgtgtct aaagagatgt gccagtttg gcaggtggcc                | 300 |
| tttggcgagg ctggcaagcg tgaggactgt cctctttacc ccaggtcaat cctgtaa                  | 357 |

<210> 46  
<211> 129  
<212> DNA  
<213> Alien to Mouse cDNA

|   |     |
|---|-----|
| <400> 46<br>atgaaatcct gcgtggatga agaatcaagt cattgctatg ggtccgcgcg gtgggaagcg | 60  |
| cttaagcaga gcacgggttt tttcgccact cgtgagcgag agagcggctt caagcaggat             | 120 |
| gggtcctga   | 129 |

<210> 47  
<211> 156  
<212> DNA  
<213> Alien to Mouse cDNA

|   |     |
|---|-----|
| <400> 47<br>atgctgctga tgccagagtt gttagaaaca aaggactcaa tggaagccga atccaaattt | 60  |
| aagagcatca gcatgcagaa ggctgagttc aaagaggggg gcatttcttt aggaaaacgg             | 120 |
| ctcacatcgt acccgaaggt ccctctggaa tcttga                                       | 156 |

<210> 48  
<211> 240  
<212> DNA  
<213> Alien to Mouse cDNA

|   |    |
|---|----|
| <400> 48<br>atgttcgcct tcttagatct gactagtttca ttctcgccg gcccggcttg gtacactacc | 60 |
|---|----|

Mod-0037.ST25.txt

|                           |            |             |            |            |            |     |
|---------------------------|------------|-------------|------------|------------|------------|-----|
| tcaccctctc                | ctgacaccga | aatctggcat  | ttaccgcctt | ctggtgctga | gctgtcaaa  | 120 |
| gcttgccct                 | tgcgaacccg | aatgcgaca   | acagactctg | agtaccacac | tatttcccg  | 180 |
| aagtacttaa                | ttgacccat  | ctcacagctt  | tcgctgtta  | ccttaatgca | cctgctctga | 240 |
| <210> 49                  |            |             |            |            |            |     |
| <211> 138                 |            |             |            |            |            |     |
| <212> DNA                 |            |             |            |            |            |     |
| <213> Alien to Mouse cDNA |            |             |            |            |            |     |
| <400> 49                  |            |             |            |            |            |     |
| atgatgagca                | agcatcacac | cccaaccacg  | gtactctgct | gccaaaatga | agacctgcag | 60  |
| ggaaccccg                 | ggtgcgagt  | gctgaaccca  | aatcaaaata | cctggggcat | catcaacttg | 120 |
| gcctacagaa                | gcatgtga   |             |            |            |            | 138 |
| <210> 50                  |            |             |            |            |            |     |
| <211> 201                 |            |             |            |            |            |     |
| <212> DNA                 |            |             |            |            |            |     |
| <213> Alien to Mouse cDNA |            |             |            |            |            |     |
| <400> 50                  |            |             |            |            |            |     |
| atgaacgaca                | tgcatgcgct | ctttgcgacc  | aaaacacgta | tcaccgagag | gggaaataag | 60  |
| ttcttctccc                | agccctcgac | caactggaac  | acgttccagg | cagaggagca | ctgtcagtcc | 120 |
| ctcagagcgc                | cactccgtac | cagcggatatg | tatggccct  | catgctcagc | gtacctcttt | 180 |
| gatatacttc                | tgatctcg   | t a         |            |            |            | 201 |
| <210> 51                  |            |             |            |            |            |     |
| <211> 240                 |            |             |            |            |            |     |
| <212> DNA                 |            |             |            |            |            |     |
| <213> Alien to Mouse cDNA |            |             |            |            |            |     |
| <400> 51                  |            |             |            |            |            |     |
| atgatgacgc                | ttggtttgt  | ggaggccaa   | atccactctt | tacctctgac | tctgagcg   | 60  |
| ctctgctgtt                | tgaaaatgga | tcatggaa    | tccattgagc | ctgacagaaa | aaaaacccca | 120 |
| gagctcgagc                | tgatgcccgc | actctggcc   | ccgagtcg   | agccaaagtt | cctgccagcg | 180 |
| gcggatcttc                | tcccagaggg | tgctcagacg  | tctaccctcc | tcctgggtca | ggcaggttga | 240 |
| <210> 52                  |            |             |            |            |            |     |
| <211> 123                 |            |             |            |            |            |     |
| <212> DNA                 |            |             |            |            |            |     |
| <213> Alien to Mouse cDNA |            |             |            |            |            |     |
| <400> 52                  |            |             |            |            |            |     |
| atgaaagaga                | atggcctggc | acattcctac  | actggggta  | agttacgggc | caatgacact | 60  |
| ggctccctgg                | cgctcgtaa  | gcagtcagat  | gtctgtttg  | agtcccagac | agcaagtgcg | 120 |
| tga                       |            |             |            |            |            | 123 |

Mod-0037.ST25.txt

<210> 53  
<211> 156  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 53  
atgaccttgt tccttccgg cctgtacccc aagtgggccg tgagccagag ccactatcaa 60  
tcctgggagg gacccgacat cgctgaaggg accatcgagg atcacctgga gcgcctcaaa 120  
ccggtcatga gagccttgat taatggtggg acgtaa 156

<210> 54  
<211> 225  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 54  
atgacacagt actggaggat tttgatcgtg ctgcgaattt atctgccgt ctcccttcata 60  
cagttctatg gagagagccc ccctcagtgg ttttgcgcgc ccaaacgctg cttaaaaagg 120  
tctcggtcga acggactaaa ggcacgatgc aattggcccc ctgttagctc tcgcacctac 180  
atcaagttca agacaatgtc ctatgctctg aagtggacac cctga 225

<210> 55  
<211> 882  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 55  
atgattgtgt tgaagtacat cctcttgctg tgtatattaca taaacctcct ggggtgcaga 60  
aatgcaaaga ctagctgtga gtgtcccagg ccgaccattt ggaagtatgt caggcagcct 120  
tcaatctctt gttacatgca ctgggtctgc catcggaaaca caggtgagca gactgacagt 180  
ggtcttacac ccaggcatga tcggcgttagc cctgacatgg ctaagggtca gcaatgggtt 240  
gtcccgccaa tgggcagttc cggggccat gagccgaact catctgcata cttatgctcc 300  
agaggaatat acttcagaga ccggaatgaa tgtgccgagg gcctgctcca cacttggccc 360  
ctggtgtatg acttcgtgat agaactaaca caacggttcc cttacaactc ctcgggtcac 420  
ggcattgaag acatagaatc cttaaaaat tggaaacttgt accggacttt cgtcatctcg 480  
gagggctata aactactgaa catcaagaga tcaccaaagt ctgagttatg ctcaggacgt 540  
atggctttt ctttcctccg gctgtttctg ttccacaaga gacagccccg tggtaaaatg 600  
gcaatgcgt atgagggcaa gtggatctt cgtggggaaag gcacagagag tggcgttgc 660  
cctctcaggg tcggacttcc caagagcgca ggcaaaagata ggatgtgtca gaccccatg 720  
accttagcaa ccaagggtcg aaatacccgaa ggcctgcagg gctaccgcct catcaagctg 780  
aagtgtgctc acctgtgccc gatggatgat caggagaggg cggtccgggc catggccatc 840  
ccattcaatg gcaagggtgg ggtgacactg tctatgctgt aa 882

Mod-0037.ST25.txt

<210> 56  
<211> 264  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 56  
atgaagcttt gtccttatgag gtggcttaggc ccgaacaaggc caaacaacct ccacccgtat 60  
ttgccgccta tggtcccata ccgcacggc ttgaggtgca cattttcaa ggccgacttc 120  
tgcagggacc cctgttggac aaatatgtgg ccaatcctca ggcgaaatct gattgcgcag 180  
gcagggctgt actgtccgtt tcaggtccca ctccctggaga tgtctgattt ctccgctaac 240  
cgagaagaaa tctgggctgc ctga 264

<210> 57  
<211> 327  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 57  
atgccggttt cgccgttatcc cagtacagt ctcaaaactgt ctctgaaatc caaggcctgg 60  
gtgttccatc aaaaccctac tggcccttc acgacaaccc ggccgcgtcg ccgcctgcag 120  
gggcggcagc agccccccct tggaggtcag aagaagttgg ccgaggagca tcctagacgc 180  
tccctggcca aactgaaatc ggctggggcg agcactgggg gacttaatat tggggatgat 240  
cggacccccc cgtgtgcac gtcggcctcg ctcagcagac ccctcaaccc taagagtaaa 300  
cagagcaaca ttatttgcat ctccctga 327

<210> 58  
<211> 225  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 58  
atgacaggtt tcttttgctc ttatgccact aaagctggaa ctgcaatgtc cttgagattt 60  
ccccctgtaa aggccagcaa tgcctgtgac ctgagccctg gaacatgtcc tcaggaccta 120  
gatagtgaaa tgcatcaatca ccagtattgg aatgcctgc ggcagattca atgcggttt 180  
aatctatttgc acatctttgtt caaactaaga cttctgtca gctga 225

<210> 59  
<211> 339  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 59  
atgaaatacc ggtgcttggg gcagctcaact gcctcttaca ccatggcgaa atatttggca 60  
ttggcaaaaa caggattatt tcccaatagg gttttcctc gcaagacaga ggggacttgg 120

Mod-0037.ST25.txt

|            |                     |            |            |             |             |     |
|------------|---------------------|------------|------------|-------------|-------------|-----|
| gagtccagcc | tgcctcagtc          | tttcaagat  | gggggaggt  | caggacgcct  | gacactcactg | 180 |
| caccagttcc | ctgatgtgat          | ggccaaagag | gaccggaaaa | ccgaggactt  | tgcggtcagc  | 240 |
| tctctccag  | agatccagcg          | cgtctccacg | ggccggccag | atatgagata  | tatgccggaa  | 300 |
| tacattgata | atggccccgg          | cagcaactgt | gtgttttag  |             |             | 339 |
| <br>       |                     |            |            |             |             |     |
| <210>      | 60                  |            |            |             |             |     |
| <211>      | 321                 |            |            |             |             |     |
| <212>      | DNA                 |            |            |             |             |     |
| <213>      | Alien to Mouse cDNA |            |            |             |             |     |
| <br>       |                     |            |            |             |             |     |
| <400>      | 60                  |            |            |             |             |     |
| atggacggag | actcccacta          | tcgcacaggg | gggaccaagc | aggataccct  | ggtccagttac | 60  |
| acattgctcc | ctgaaattga          | cttttcggg  | gggattgctc | agaatatgtat | gatcatgcga  | 120 |
| gttgccagaa | ccccccatt           | tgttgcagaa | caccgtcagc | ttatgcagga  | tggagggcca  | 180 |
| gagcagagaa | atatggaggc          | ccgtgaacca | gcccaccggc | tcactaaggc  | gatgtatgt   | 240 |
| tcatgcaaag | cagaagtcaa          | ggggatggtg | acgagcctct | ctggggtgcc  | gacctgcggc  | 300 |
| ctgccatcgg | aaaaggagt           | a          |            |             |             | 321 |
| <br>       |                     |            |            |             |             |     |
| <210>      | 61                  |            |            |             |             |     |
| <211>      | 192                 |            |            |             |             |     |
| <212>      | DNA                 |            |            |             |             |     |
| <213>      | Alien to Mouse cDNA |            |            |             |             |     |
| <br>       |                     |            |            |             |             |     |
| <400>      | 61                  |            |            |             |             |     |
| atgcagatga | ttgtcccaag          | tggggagaca | aagatgtacc | ctccgcttgg  | ggccctccag  | 60  |
| gaggatgact | gtatccaggc          | ccagtggctg | cacacaacct | cccaaagctt  | ccatgagtt   | 120 |
| gtgttaagga | atgcagtccg          | cacaccatca | aaggttacca | aattcccttg  | caaaaagt    | 180 |
| tgcgtcattt | ga                  |            |            |             |             | 192 |
| <br>       |                     |            |            |             |             |     |
| <210>      | 62                  |            |            |             |             |     |
| <211>      | 666                 |            |            |             |             |     |
| <212>      | DNA                 |            |            |             |             |     |
| <213>      | Alien to Mouse cDNA |            |            |             |             |     |
| <br>       |                     |            |            |             |             |     |
| <400>      | 62                  |            |            |             |             |     |
| atgagctgcc | cttttcttct          | tcgtggcatt | cagatgcctt | ctctggagag  | aacttcgt    | 60  |
| tcagatcctg | gctattccat          | ccattttgg  | tctgaaatgc | ttgatgttgc  | tcatcttgct  | 120 |
| tctggcacag | agcaagtcca          | ctgggcgaca | ctagaatgt  | actcgcagct  | cggaaggaca  | 180 |
| cttgagcctc | ttgaggagat          | cactctaagt | tgggtgttgt | tcctcccaa   | gttctttca   | 240 |
| gaagacatct | ggaaacttaa          | atccaaagaa | cgttccggcg | atgacatgt   | tgagaggatc  | 300 |
| acatcaatgg | agctcttgct          | gccactgaga | cggctagaac | agctaagctt  | ctattcc     | 360 |
| ttctctcagt | gtactgccct          | tcgccccgg  | aagaccagcc | caccaattcc  | tctgtgcgt   | 420 |

## Mod-0037.ST25.txt

|            |            |             |             |            |            |     |
|------------|------------|-------------|-------------|------------|------------|-----|
| tccctggca  | gtgccataa  | gcagcaaaga  | acctggctgt  | acaatgcact | gatcaagtac | 480 |
| ggggcttcga | ggagaaggaa | ggtccccaaag | cggatgccca  | ttgagagtcc | gttcagcctt | 540 |
| gatgaggagt | gtttccatt  | ttcagtaatg  | cggcaaagggg | agacacggac | aattggcctc | 600 |
| acacccatca | tgcagttcct | gacctgtcg   | cccgtaaaga  | gtgtggatcc | gagccggagg | 660 |
| gcatga     |            |             |             |            |            | 666 |

<210> 63  
<211> 1311  
<212> DNA  
<213> Alien to Mouse cDNA

|             |            |            |             |             |            |      |
|-------------|------------|------------|-------------|-------------|------------|------|
| <400>       | 63         |            |             |             |            |      |
| atgatcaactg | ccaaagatga | gaccagatgt | ctgcattcct  | cccgagtaga  | tcggtatcg  | 60   |
| acacttgcgg  | acccgatgtc | tgaggagatg | tcgtgttgc   | tcctgggtgg  | gcgcgttcac | 120  |
| gccaaggggcc | tcttgacaa  | aattgtccta | atccagaatc  | ctttcattcct | ccacgacttt | 180  |
| ttcatgcgtt  | tcccttctcc | ctcccaggta | cctctataatc | agcgctacaa  | acaagacctt | 240  |
| gataaggacc  | tgtgttccag | cctgccttgg | tactacaacc  | cgaagctg    | cgacgcact  | 300  |
| tcgcagctca  | cctacaagct | ccgcacaatc | tctgttggcc  | caagacaaga  | ccatggcact | 360  |
| aagacgtctc  | tcccaatgct | gactattacc | caggtgactg  | cactgagcga  | cctgagaatt | 420  |
| tttttctctg  | gatttgggaa | ggacctcccc | ctggagccct  | ttttctca    | cctttcg    | 480  |
| tatcggtgcg  | ctttctgggt | tttacagttc | ctgctctata  | caaggaatgg  | cctcaagtac | 540  |
| agcaaggcgc  | atgacaaaga | gtgtccatgg | cccttcatgt  | ccaacttccc  | acatgcccgg | 600  |
| gcctgtcggg  | gttggctgtt | ttcgtgttcc | agaaagacaa  | gaactttacc  | ctcattcgac | 660  |
| agcgtgaggg  | agatagtctt | agcctcaaag | tcctccgata  | ggtacatgaa  | gcattcagtg | 720  |
| catcgagct   | gcagttcaac | agagggtgcc | aatccaaga   | cgagcctgga  | ctgtcttaat | 780  |
| tcaatgcaga  | agaagaagcg | tagagatgaa | gaattactcc  | aaacaaatga  | atttatgatc | 840  |
| tcctgtggat  | ccctggctgt | gcaataccga | agcatctccg  | gcataattta  | tttgc      | 900  |
| gagcagcatt  | acatgcacca | gaccgcacc  | agtttcagt   | ttacccagga  | ccaatcg    | 960  |
| ctggctcggg  | agaatcacaa | ttgggggggt | gcctcta     | actacctcct  | gcgcgagaag | 1020 |
| ctggatgggaa | agccaatgag | aggcatgatg | ctgtcccaac  | acagcgtggc  | atgtggttg  | 1080 |
| cagggcaa    | ccattgcaac | caacctgttc | aagccttcag  | tgaacttggc  | agaagagttg | 1140 |
| tctgtgaaat  | acactggagc | ttccctgcgc | tcagacgccc  | tgctacagct  | ggctcaggcc | 1200 |
| ggactgtggc  | cccagaagcc | gtacctgatt | tggagaatca  | gggtggaaaa  | gacccacgaa | 1260 |
| tggggcacgg  | gtgaactggc | gctgagcatg | gtcctgagct  | gcttagactg  | a          | 1311 |

&lt;210&gt; 64

Mod-0037.ST25.txt

<211> 306

<212> DNA

<213> Alien to Mouse cDNA

<400> 64

atgtgctatc catcgctga ctggagaatt gtgataataa cccagttact gaatacgaga 60  
tggatcgcag tcagggcact cttcatggca agtggacgca agccttgttc aaaggtgatc  
caagccgcca ttgcctcaat ggcacagctg ctctatgtgt caaaggccag cacattagta 120  
gggtcagtga tggagggaaag cgaggactgc agttgcgagt ttcctgatat gcctggatt  
atgggagatg tcccctcccc aatgttcact cttggcatga tcctgccatt aaccttgaaa 180  
caataaa 240  
300  
306

<210> 65

<211> 264

<212> DNA

<213> Alien to Mouse cDNA

<400> 65

atgctgacac tttgcatgat cctccaggcc ccgacaaaga gaatgatgga tggatctgaa 60  
agtggagtgt tgcagttcct gcggagtcgc tactcagggt acctggaga tcccatggca  
tttctcgagg atgattccag aagtaagccg acggagagaa ccggccttcc tgtggagatc 120  
cacatgatgt cgtttctgga ataccatggt gaactggtca acttcttctg ggcagaagg  
cagcttcagg acgaaggact ttaa 180  
240  
264

<210> 66

<211> 285

<212> DNA

<213> Alien to Mouse cDNA

<400> 66

atgcacttgc actacgatcg catgttattt atgcagcacg aaacgttgt tatatctatt 60  
tcgcagatca atgacctctc ttgcaccacg tcaccagcca cgatggcag gtgcataacc  
tggggccca cgaggacaac tttctgctc tttcggaga ctgatgtcag ccacctgtgt 120  
ttgatcaaac agctgagctt cttcagtcag atcctgcagt acaagcagct catgtcgaac  
atatcgagc gcacggacg atacatcaga agctaccatc tctaa 180  
240  
285

<210> 67

<211> 663

<212> DNA

<213> Alien to Mouse cDNA

<400> 67

atgaggcact accctgcttg gcaaggctca gccatgctct ttgagtacac tggggatgg 60  
ctccagcagt cccctagtct tctgagtctg ggctcaattt ccaatacggt gatcatacga  
acggaccggg cccccacagga gcgaacgtcc tgccataatg gtgaccttat caagagtgcc 120  
180

Mod-0037.ST25.txt

|             |            |            |            |             |             |     |
|-------------|------------|------------|------------|-------------|-------------|-----|
| ggcacccccc  | tgctggatat | gcgagatccg | catgtgtcag | cgaggaggagt | gactccctcg  | 240 |
| aacctgatga  | tctgcaagac | tccaccctct | ggtttctgcc | tgtctcactc  | ggactgctct  | 300 |
| ggagaaaaagc | agatggctct | gagaatgtca | gccagcaata | tcttcaggg   | tcggaaaacc  | 360 |
| ccggccctctc | cttgccagtc | gacagctacc | tgcattctct | ggtactccac  | ctcaaccctgt | 420 |
| gctgactata  | ttcggcagtt | ttacctgtgc | acccgagcga | atgggcgagc  | tccccgcccag | 480 |
| aactgcattg  | gcatgggcat | actgtcattg | tattctccgg | tccagatcga  | ctccccctccg | 540 |
| ccccagtgcc  | caacacccct | gtttagcctg | gtcggccggg | tgacgaggga  | gtcacagcag  | 600 |
| gttggggtgtc | aacgagccct | aatgctgggt | acgagcaccc | ctctgctcaa  | ccgcccgaag  | 660 |
| taa         |            |            |            |             |             | 663 |

|            |                     |            |            |            |            |     |
|------------|---------------------|------------|------------|------------|------------|-----|
| <210>      | 68                  |            |            |            |            |     |
| <211>      | 120                 |            |            |            |            |     |
| <212>      | DNA                 |            |            |            |            |     |
| <213>      | Alien to Mouse cDNA |            |            |            |            |     |
| <400>      | 68                  |            |            |            |            |     |
| atgcggattg | atgaagggac          | ccaggaggag | tgtgagctct | gcgctctggg | cacgaagagc | 60  |
| ccagccatca | tttcgcctcg          | acagtacaga | attcgaactg | tgggtttcat | gctcagctga | 120 |

|            |                     |            |             |            |            |     |
|------------|---------------------|------------|-------------|------------|------------|-----|
| <210>      | 69                  |            |             |            |            |     |
| <211>      | 249                 |            |             |            |            |     |
| <212>      | DNA                 |            |             |            |            |     |
| <213>      | Alien to Mouse cDNA |            |             |            |            |     |
| <400>      | 69                  |            |             |            |            |     |
| atgctatcg  | aggcctcgag          | agatcgctg  | acggaaatgg  | ccatgatgac | agattcttat | 60  |
| cacctgcca  | ccatgcctct          | ggccctgag  | tactctggca  | cgtttaggga | aagctttgg  | 120 |
| cgaacatctc | cacatgcgt           | tgatccaggc | tggcagagcc  | aggtgtgtga | gcagcatgat | 180 |
| aaccgcttga | acagggagtc          | aatcgctcag | gtcgcttatac | agagagggat | ctggatgagc | 240 |
| aagaactga  |                     |            |             |            |            | 249 |

|            |                     |            |            |            |            |     |
|------------|---------------------|------------|------------|------------|------------|-----|
| <210>      | 70                  |            |            |            |            |     |
| <211>      | 438                 |            |            |            |            |     |
| <212>      | DNA                 |            |            |            |            |     |
| <213>      | Alien to Mouse cDNA |            |            |            |            |     |
| <400>      | 70                  |            |            |            |            |     |
| atgtacatgc | cgatttacga          | gcccaagatg | gagatgtccg | gtcagccag  | aatcgaaaag | 60  |
| gccccatcg  | atggcaagtt          | agcgacccag | ctctttccg  | aatatttcac | cgagaaggag | 120 |
| ctagacctgg | ttgaccatgc          | tgagtcttac | ccaatgatag | tgggagattt | tggggcacg  | 180 |
| cccaccaaga | attcaataca          | gacccaggc  | ggatcgatct | acggcctggc | tcagagggac | 240 |
| atcagcttta | aattaatgtc          | catgtccagc | agtttggaa  | atgtggaaag | gtatgcagcc | 300 |

Mod-0037.ST25.txt

|   |     |
|---|-----|
| ccctttgct taggtctctt tccgcactac gggAACATGG AACTACGGGA ACTTCTGTT   | 360 |
| tcccacatga aagcgcgcga aaccagaacc acgtcaaccg agtctctgac atccatcaga | 420 |
| ctcaggtag cgtggta   | 438 |

<210> 71  
<211> 489  
<212> DNA  
<213> Alien to Mouse cDNA

|  |     |
|--|-----|
| <400> 71<br>atgctgagat acagccggat ggccatcaag caacagctt accaggttgt ttacacacgg | 60  |
| tcccttcat tcacggacct ccacttgcag aacaaggcagg caggccctga aaaacatgg             | 120 |
| aacttcaacc tctggggccg catccggat ctcaggatgc ggtgtatcct gaagttcagc             | 180 |
| tggggaggag aggtttttgt tcttcaatca agttgttcct ctgactctt ctcagttgag             | 240 |
| attgagttgg cagaggtgag attcctatcc taccagaact cacggttgcc agcgccacgc            | 300 |
| accgactatc tgagtgcgag ccgcacttct aaaacaagct gttctctgcg cgtgttcata            | 360 |
| ttgggacacc agctaaactg ccctctgtgc actgctgctt cttttattga agggaaacta            | 420 |
| tgttagcaacg atactggaga ctacagctgg ccgcaagcgg gccccgtaa ctggtccgct            | 480 |
| tatctgtaa  | 489 |

<210> 72  
<211> 303  
<212> DNA  
<213> Alien to Mouse cDNA

|   |     |
|---|-----|
| <400> 72<br>atgattggaa aagatgagat ctatatgctg tcaaaggac atcagccaag acgttaggact | 60  |
| ctgaaggcct caaccccaa cctggtcagg cccaaGCCGC cctgcaccat ctctgtgcgg              | 120 |
| gccaccttaa tgctaattctg gttcccttc cagtgcttga tagctaagat gcagttgacc             | 180 |
| ctggagacct ggtctccctg gattatctgg ctcaatctta agggatggcc ctgcccgtac             | 240 |
| ctgcccgtta tgtacccatc aagaaagtct gcagctgact acactgactc tgtggaaaac             | 300 |
| tga   | 303 |

<210> 73  
<211> 141  
<212> DNA  
<213> Alien to Mouse cDNA

|  |     |
|--|-----|
| <400> 73<br>atggggctct ggcggaccct gagggccgat gtcaagaaca gcgatccatc cccttacag | 60  |
| aaaggacga aagctaagca ggtggagagc cggaaaatca tggagtacgc gcagacagag             | 120 |
| ggcacatca cggtggagta g   | 141 |

Mod-0037.ST25.txt

<210> 74  
<211> 180  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 74  
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gctgagttgg gaactgagag tattatcctt ctggatggag ataggagaag tgcgcgacaca 120  
tctggcaaga ggttcaagaa ggtatcttat tacttccagt gtgactgcct gacgctgttag 180

<210> 75  
<211> 141  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 75  
atggagcttc cccgctccag taagcctatg accccgtatc ctgagcgcag cgggatgggg 60  
cactggtgga ttatctatac caagcattcc tccagagggt cctctaataat gatctgctgt 120  
ggtccagact ctagcaaatg a 141

<210> 76  
<211> 123  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 76  
atgctccagg accgctgctt cctcgaaag tgcctttat ccagcatgtt atgctattac 60  
aaaaaaaggct tgagcgaggc ttttggcgaa cccaatgaac agagctgcaa catgcggatg 120  
tga 123

<210> 77  
<211> 177  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 77  
atgaaacaag gacctgcct ggaggaggaa aagttagctt gccagagcct gacccatcag 60  
tttctgagtc cctcgagagg caaccagatg cagtggaaact cccaggttgg aagaaactgg 120  
actgtactgg tgccaaagga ttgtcttagt gtgttaaga gttccatgaa cggctga 177

<210> 78  
<211> 174  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 78  
atgcagcgc cgttcgcccag ttactccacc agtttcaagt caagtgtatct ggcgactaac 60  
tccagcacgc agctggtctg ttctggccat ccctcgggac ttcccttcgc ttcaatgttc 120

Mod-0037.ST25.txt

attagggctt tgtcgcccccc tgcgctgcgt ggccccccaa agctcggatc atag 174

<210> 79

<211> 363

<212> DNA

<213> Alien to Mouse CDNA

<400> 79

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aaggtgttga agaagctctc aaccatccag attgagaagg aggagccat cgccctgtct 120

tgtggtaagg ccccccattc tgacctgaac caagtgctcc ccatgtttaa tttcgagttt 180

tttcatgggc tcaacgtggc cgagaacctg gtgtctggaa ctgcttcgca ggagaaggaa 240

caatgctgct atggtttcaa cagcaaaggc cgctctgtcc gggcactgga attcgtgtgt 300

atcagggcct tcagcaacat ccaatcggat gactccagtg acgccccttt tggcctggtt 360

tga 363

<210> 80

<211> 462

<212> DNA

<213> Alien to Mouse CDNA

<400> 80

atgagcggga acctccgtat caaccatgg ctgactgcct gcacatgtgg ggaaaagtgc 60

actcagtgtg ggcctgctaa ggccgccaac aacaaacgct ttcccaggaa tcaggccaga 120

aagcggctgt attcgccatc cccacccatc ctgaacacaa tgatcctctc ccctaaaagt 180

tgggtcacgc tgcacgttgc gaagaagcag gccccacgt gttggctgct ctccaccgcc 240

aactaaaaat tccttccatc ccagttgcaa ccggaggcag atcggaaactt ttgttagctct 300

gattaccacc gcactctccc ttgtgcgcag gctatcatca caaatttggaa gctgaaaatc 360

tggacacctca ccaaagcgaa cagtcccgaa cctgtggcga aagccctggaa gttcaacacg 420

atagtgccat tgcacgttgc agaggaccgc tttattgggt ag 462

<210> 81

<211> 168

<212> DNA

<213> Alien to Mouse CDNA

<400> 81

atgtctccca acgacattca ggtgattaca ggcttgcacc aacgcttgcc agtgcctctc 60

aacacccttc gtatgtctga caaggcattc actctttgct gcaagaagac caaccctggc 120

agcctgaaaa tgcagatgcg gaaccgtcac ccggatcttc agaaatag 168

<210> 82

<211> 207

Mod-0037.ST25.txt

<212> DNA  
<213> Alien to Mouse cDNA

<400> 82  
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aatgttaacc attacagaaa cactattctt cagtcctgt ttctcatctt ctggattgaa 120  
atttgtgagg agcattccct tcattcatca ccgaggcaga ccgcctcctc ccagttctac 180  
tcaccgagac tcaactccta cgagtaa 207

<210> 83  
<211> 144  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 83  
atggaccgcc cacacatcggt gtccatggcc ttttgaact gcgcttcctc agcggccatc 60  
ttgaaggggcc ataaaatccc cctgcccata aagatcctgc gcttcgatcc actctctcaa 120  
agtactgaat ttccctgggg gtag 144

<210> 84  
<211> 132  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 84  
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actgaagcct cgaatggaaat gctgatcacg ccctctgaag aaatcaccag caccaggccc 120  
gtgatattgtt ga 132

<210> 85  
<211> 192  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 85  
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cccgactgga caatgctaaa caagccggaa ctgtacattt gcgggattgtt ggagaactac 120  
tgccagtaca agggtccccat ctggatcttc agggtgacc ccgtcaga aggccagcgt 180  
ctgaagttt ga 192

<210> 86  
<211> 492  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 86  
atgatgtttt aggcctgctt cccactcggtt gattcgagg ggaagagcaa gtccaagggt 60  
ctgaggaagg gagaatctac cccgcttggaa gggggccgaa agttcctgtt gctgtctacc 120

Mod-0037.ST25.txt

|   |   |     |
|---|---|-----|
| agcctcagca tctactcggt   | tattaacatg ggccccatct cccttaacgc acacatttat | 180 |
| gataacacac tccatcagac attcatgtcg cgctcagtgc ttgagcggct agtttggaaacc |   | 240 |
| tctcaaaagt tcgatacaca ccctcatatg tgtgctgcag atgctcagta cacaaggatct  |   | 300 |
| agacggtgtg agcaggcctt ttgggcaccc ttgtcgccctg cgcttgttt ctccatcctc   |   | 360 |
| tctcaagaaa tgggcgacac ccccaagaaa aaccgggtgtc tgaagggtcc ccagtgcctc  |   | 420 |
| aagcgctgtt gtcaagagtc ctgcctctct ggtggctttg taatcttga caatccagtc    |   | 480 |
| tgctacttat ga   |   | 492 |

<210> 87

<211> 222

<212> DNA

<213> Alien to Mouse cDNA

<400> 87

|  |     |
|--|-----|
| atgaatgcag aggacatgct gggaaacac tgcgcttatg cttttgcac agtccctatc    | 60  |
| ccgaaggggag ctgtgaacct gaaaaccgag tttgagatgt gctgtgcgaa gtctgccaac | 120 |
| ggcaactccc gcaaagacag tgttcaggt ccatgcccta agatgaggca gaagtgggac   | 180 |
| tggggacccc gagaaggagt ggctcgacca ggagaattct ag                     | 222 |

<210> 88

<211> 150

<212> DNA

<213> Alien to Mouse cDNA

<400> 88

|   |     |
|---|-----|
| atgagagtga gggcacggct gtcaatcccc ttcaccacga gatccatggc ccttgctac    | 60  |
| cggaaatcggtt gggacaccggg ttttgggtt cagaaggagc cccaggatcg gtacacggga | 120 |
| aggaaatgtc aacccgtact gatgacactga                                   | 150 |

<210> 89

<211> 297

<212> DNA

<213> Alien to Mouse cDNA

<400> 89

|   |     |
|---|-----|
| atggagaagc tgcctggcg tgctggcctc ctccactctc aggatggaat aaccagggcc  | 60  |
| gcctaccgg gaaaagagca gtctccgg ggccgcaatg cgacctttg gacagctcag     | 120 |
| cctgactccc gggcggcctc ttactccag ctctctgtcc agaagtatcg aacaacagcg  | 180 |
| atgtgcctgc ctgtgtccat gtctagtaat ctggtctcca tggagcagcg gttccggcac | 240 |
| aagctcatcc agtggcggtt gtgtctgaga atgtctagtc taaccattat gtcata     | 297 |

<210> 90

<211> 129

Mod-0037.ST25.txt

<212> DNA

<213> Alien to Mouse cDNA

<400> 90

atgtcttga cagatttct ttcttctgt gttctgagag taatggccaa acatctcaca 60  
gactataggg cctcagctca gcttgggtgc tgtgaacagc aggcttctgc atcccgaccg 120  
gaggaatga 129

<210> 91

<211> 123

<212> DNA

<213> Alien to Mouse cDNA

<400> 91

atgacggcct tgggggctgc aagttatagc cggtctgttgc tctatgtatgg ccatccgtct 60  
gccccagagg gtggggccaa gcgtggcaag caggtgaagc catggttcaa gcaattggaa 120  
tga 123

<210> 92

<211> 435

<212> DNA

<213> Alien to Mouse cDNA

<400> 92

atggtgtggc tcctacccccc cttaccattg agccactgta agaatccccc cttcgtaag 60  
tgcttcagg ttgagcgctc gtgtgcagga atttcttgct ctgatacgcc gccctactcc 120  
tgccgtcagg ccgagagctc cacttcatat ttttacccat tctcaatgac cagaaggcacc 180  
atgaccatcc cagacccaaac caaaacctgc caggcgtgtt ctgtgaccgg gttcccccctcc 240  
cgggaggaaaa agaccaagaaa cctgatgaca ttctgttaca agatgcattt gcagatggtc 300  
ggctatccgg tcaaagacac gttcctcaaa gaggccaagg actctgattt ttcaggggact 360  
gagtttgagc tggtgaatgg gccacccccc tggggctcg ggattcagtt gaactgctgt 420  
tcccccagtgc cctga 435

<210> 93

<211> 198

<212> DNA

<213> Alien to Mouse cDNA

<400> 93

atgtccaaagg agattcatct gcctgttctg agccgggccc gactccctcc gagttgttag 60  
aagcttcgag gctcccccctc tgtgtctcc atgacatttgc cttacccccc gccccaggcgg 120  
agccaccagg caatcgccac ggcgtcccgagctcatgc taacccttggaa cccctcgcc 180  
aaaggaccgg ggtattga 198

<210> 94

Mod-0037.ST25.txt

<211> 726

<212> DNA

<213> Alien to Mouse cDNA

<400> 94

atgcccgcga tggccactgg cgccggagtgg gcctctgccca cacggatatg cgaccgttat 60  
gcgacttccc acgtgaggcg catgagatca ggggcaagac tcatcaaaca gggagtggag 120  
ctgatcaagt accgccccac cacttgcccc tacatagcca tggatgctcg cgacctttg 180  
cgacacattc ggagccccga atggaaaccc tactgctact gtctgacagc tatctcaagc 240  
tcaaagaact atcttctgct gtccgtcagg gcccctccat tctcgaaaaa gaaacgactt 300  
cccggtggagt gggtccttca gtgtacccccc atctgcaagg ccttcaagg gtcaacttca 360  
tacaagctga acatgttctc ctcttgcgcg cacactagcg ctttgacttc aagggattgc 420  
aaaaagtcaa tcatgaggcg caaccattgc tacttttatac ctttccctgga tggagcagga 480  
ttccccggggg ccattacatg caaaatcaga gnatgcattc tgggcatgca gaactctccg 540  
gtggggccccc ttaatgggtg ctgcaagcag tctgtcaggg atgatgagac aaaggcattc 600  
ctgcagcccc gtttggtcgg gacgtcaatg gtggattatg tgccgctgca actattctgg 660  
gagcaagttc cgctccctcaa gtgttctctt aacccaataa gcttgaagc cgccaggacg 720  
cagtga . . . . . 726

<210> 95

<211> 159

<212> DNA

<213> Alien to Mouse cDNA

<400> 95

atgtcttatg acttacggtg gttcacccgt ggggcccacaa tcacagccga aatcatctta 60  
tcttgtaagc tcccaaaaagt gagaatggat ttctgctggg tgaagcagtc catggaggcc 120  
atggtggcca tgaaggacca gaaagacgcc ttttgctga 159

<210> 96

<211> 318

<212> DNA

<213> Alien to Mouse cDNA

<400> 96

atgaccagaa gctggccctt ggtgccaccc cacctgttgg ttggagccga aacaaccctt 60  
tgacttcat atgggtacaa agcgaagagc aacatacgtt ttgtgttctc tgaggcttt 120  
gaggctcaac agaggcacga aagccgttca accaaccatg cctggccca gccagcaggt 180  
cgaccggtcc atctcattaa gggcaggag aatcttaggg aaaatttaga tccgagctgt 240  
cccaaaccac agggagcggc ccggagtctc acaaaggatg gaacaatgaa gcaacgatac 300  
gacttctacc tgccgtaa . . . . . 318

Mod-0037.ST25.txt

<210> 97  
<211> 732  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 97  
atgaagtatg tttcccagga agcccacctg gtctatgttt atatgtatgc ggatcactac 60  
ctcagcagtg tgctgtcttc ccaagatggg cgcccccaa acttcatcac gcgcctgaca 120  
aatgcgagtg acaagtggac taacaagacg aagtccatga aggacagcta tcagggtttg 180  
tgggaggtgc ctgggatcct ggagctgaga gcacctgaca tggagctgga acttctgacg 240  
aatggaaag ccctgatggc gatccgcattg atcaacatga agaattcccc gcaggatgcc 300  
aaagaggcct cgtctgcattt catggccaaa gttcccagtt tagtgtgcc atgctccggc 360  
tactttgcct ggcggcagaa gggcttggag cgcaactttg atctgaaagg ccaaagtgtc 420  
aaatacagaa aaaatacagg tcctggcctg tctccacctc aggtgaggac ctcctatcag 480  
gaaaacctgg ggacacccct tctgccacca attcagatga tgagctaccc agtgatttcg 540  
gacctcccccc ggaggtctaa acgtgattgc aggcgggccc gtggagtctt tgccccacgc 600  
gagggacttag ccaaagaaca gggcaaaagc aagctcccg 9 cagcttacat tcacaacaag 660  
ggtttcgagg gcctgactcg tgaacaagtc caggggtatg ctgagagctg tgacgttctg 720  
ccacagcagt ag 732

<210> 98  
<211> 132  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 98  
atgggcacaa agcccttctc actcaaggga aagagctaca agcagcctaa cctgaaaatg 60  
caccccccctcg tgcctccctt aaacagattc ttgtgtcagg gtgctgcagt tgcagagcgg 120  
aaaatgcggtaa 132

<210> 99  
<211> 441  
<212> DNA  
<213> Alien to Mouse cDNA

<400> 99  
atgaatggc tcctgcacac gacatataag gagaagacgt cgtatcccg 9 tgaggtgttt 60  
gggcatacg 9 cagaaatttc ccgcctgtgt cctctgcctt ccagttccat ggcaaccccg 120  
ccaaatgacg tgaatatgg 9 gatccccctc aaaagacgtg cgctgacgaa cacctatggg 180  
tctgcttcga ttcgtcagat gacgcccatt tacaacccta ccgtctctgc ctgggtttac 240  
tcgagccaag aggcaactcaa gtgtcggttac ctgggcttcc ggcggagaat tgaaatgccc 300

Mod-0037.ST25.txt

|            |            |            |            |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| ttttgttta  | gtggtgccgc | caacagatcc | tacaacttt  | ctgctaagga | acgcttgggt | 360 |
| cacgcacctg | cctgtatccg | atggcacaga | tatttatgga | tgaacttgga | catgaaaatg | 420 |
| ttgactgccc | ttcgcatctg | a          |            |            |            | 441 |

<210> 100  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

|       |     |             |            |            |            |             |            |    |
|-------|-----|-------------|------------|------------|------------|-------------|------------|----|
| <400> | 100 | aaccaatccc  | atcccaggtg | tgcggcgaat | cggtcgatct | agtccataatt | agccggatag | 60 |
|       |     | gaaaaacctca |            |            |            |             |            | 70 |

<210> 101  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

|       |     |            |            |            |            |            |            |    |
|-------|-----|------------|------------|------------|------------|------------|------------|----|
| <400> | 101 | aagaaccac  | gccgtctaca | tatcgggcac | gtgctataac | gactcaggag | tattnaacga | 60 |
|       |     | ccgcacggaa |            |            |            |            |            | 70 |

<210> 102  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

|       |     |            |            |            |            |            |            |    |
|-------|-----|------------|------------|------------|------------|------------|------------|----|
| <400> | 102 | acaggtgtcc | tcaaaccagc | ctgaaacgtt | actaggtgaa | gaatcaccgc | ggttgtcggt | 60 |
|       |     | agttaagcga |            |            |            |            |            | 70 |

<210> 103  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

|       |     |            |            |            |            |            |            |    |
|-------|-----|------------|------------|------------|------------|------------|------------|----|
| <400> | 103 | acccgcgtac | acagtaggca | ctctacggcg | cgtttagcgt | taatcaccaa | ttttgcaata | 60 |
|       |     | gtcaccagag |            |            |            |            |            | 70 |

<210> 104  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

|       |     |             |            |           |            |            |            |    |
|-------|-----|-------------|------------|-----------|------------|------------|------------|----|
| <400> | 104 | acggacttacc | tcggccactt | cattggcga | cctgcggata | ttgcttacga | atctcgatct | 60 |
|-------|-----|-------------|------------|-----------|------------|------------|------------|----|

Mod-0037.ST25.txt

tccggattat 70

<210> 105  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 105  
agaagtcgtg tgatcgaggt agcactggga tttacgaaaa ttgccttacc ggtatacgct 60  
aggccataacc 70

<210> 106  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 106  
agcccacata tagcccacgc gggtgtcgac aacatatgtc gtatgcgagt aacgtttcg 60  
tttgagatgg 70

<210> 107  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 107  
atactacttt tgggtatgct agctacgtag tacccttcaa tagccgtcgc ttggtctctt 60  
gcgcgtcacg 70

<210> 108  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 108  
catctatcta tgtaagttac cggcatgggt tatggattcg tggaccgcga tgtgacgtag 60  
gggtttccac 70

<210> 109  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 109  
cattttaccg ttaccggaa gcgtgtgtgt cttaatttgc gcgtacccag tgttgagaac 60  
gacggaacag 70

Mod-0037.ST25.txt

<210> 110  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 110  
ccatccgggc cataagttta tagtagcgat tgtttgccc ctaccagcga atcgcgccc 60  
gttagtaatc 70

<210> 111  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 111  
cccgagcttg cgctagtacg attatgtacc gctatgtcaa tttgacgccc tcgcactg 60  
gcactttatt 70

<210> 112  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 112  
ccggctcggt gtcaccgcgg aagtacctt gagtatcgca cttatcggt ttaacctg 60  
cgtaactaaa 70

<210> 113  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 113  
ccttggatgg gtaaattccc tcgtctacgc gtaacaactg aacgcgtacg gcgacgg 60  
caggaaatta 70

<210> 114  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 114  
cctttccgtg ttactcggcc ggcaaggacg cctcgtacca tctttgatag atgtattgc 60  
gtaaattcgg 70

<210> 115  
<211> 70

Mod-0037.ST25.txt

<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 115  
cgcgaccccg actggtagtt gcgcgctcgc attaccgagt tcacatcgca tgtactacat 60  
tagagaaaata 70

<210> 116  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 116  
cggccacaac tctcaggacg catataagac gcggaaaggc atacacgtct acttagagac 60  
accgagactt 70

<210> 117  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 117  
ctgcttaacc gttccagagg ggcgttcgta tcaaaaaggg tgcgatttcg atcacgtcgc 60  
agtgactcat 70

<210> 118  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 118  
gaatggcatc aacggcgctg tacatagtct tctcgcttac ataatagcgc tagttgatag 60  
gaaccagggg 70

<210> 119  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 119  
gagctgcaca cccgcagaca tcatagttag tgtaatcacg cacgtgacca gttaaccat 60  
ttcgtggaga 70

<210> 120  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

Mod-0037.ST25.txt

<400> 120  
gatggattca cgaacgagca cttagtaacg cctggtactg acatcttatt gcacgtatg 60  
gagagcctgg 70

<210> 121  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 121  
gcaacgacca gctaccctgtt aaccgtatat cagagtcgaa tgctcgccgt actgttcgaa 60  
gtactcatcg 70

<210> 122  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 122  
gcagaattcc taaccatgca agcgtggcga ctcgtctctc gcaaagttct atacgaatca 60  
gcgatgggta 70

<210> 123  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 123  
gccctctcgt cccacgttcg ctcgtttgt tgacactact gacgggtatc cctctaaata 60  
cttctctttt 70

<210> 124  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 124  
gcctcttcga tggggtccgt ctggtcagta ccgacgaaaa tgcgacggta gatgtcagaa 60  
ttgattctgt 70

<210> 125  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 125  
gcgggctctt gtgcaaactt atggggctag tgactcgggt gtagcacgtt ttgcgaagac 60

Mod-0037.ST25.txt

|  |    |
|--|----|
| taagacagta   | 70 |
| <br>   |    |
| <210> 126  |    |
| <211> 70   |    |
| <212> DNA  |    |
| <213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications. |    |
| <br>   |    |
| <400> 126  |    |
| gcgtctatga caggtcgggc acttaggcgg cgacgcttga tgtttgagtc gcagatatta  | 60 |
| gtttataagg   | 70 |
| <br>   |    |
| <210> 127  |    |
| <211> 70   |    |
| <212> DNA  |    |
| <213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications. |    |
| <br>   |    |
| <400> 127  |    |
| gctatctaac gcggtcttgc caataactacg aatggttgct acaggatatac gagtaccgca  | 60 |
| aaatgggggc   | 70 |
| <br>   |    |
| <210> 128  |    |
| <211> 70   |    |
| <212> DNA  |    |
| <213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications. |    |
| <br>   |    |
| <400> 128  |    |
| ggggcaact ctccaaccga gcgtaatcc agcgattatt atcctactcc atactattag  | 60 |
| cgggtatacg   | 70 |
| <br>   |    |
| <210> 129  |    |
| <211> 70   |    |
| <212> DNA  |    |
| <213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications. |    |
| <br>   |    |
| <400> 129  |    |
| ggtacgaatc tcccattgca tggacaata tagtccacgc attggacgca cccaccgatg   | 60 |
| gctctccaat   | 70 |
| <br>   |    |
| <210> 130  |    |
| <211> 70   |    |
| <212> DNA  |    |
| <213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications. |    |
| <br>   |    |
| <400> 130  |    |
| ggtcgtaccc aacctgacac gagatgtcgg cgctcggttc gattggacga tcggatata   | 60 |
| gatcaagcaa   | 70 |

Mod-0037.ST25.txt

<210> 131

<211> 70

<212> DNA

<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 131

ggttgttcca tgtactcgat actacacctagg catcaggtgt atacgccggc ttggatgggc 60

gttcggcaaa 70

<210> 132

<211> 70

<212> DNA

<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 132

gtgccacccc aattagtctt ttgtccgggc caagagtacg acaacggggt attttggtac 60

tatatccccac 70

<210> 133

<211> 70

<212> DNA

<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 133

gttaagggtc tcgaaagatt tctactctcg acgtaccgtt ggcagcgcac taagaacggg 60

taatgtgctg 70

<210> 134

<211> 70

<212> DNA

<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 134

gttaggcact tgcgctcaa gcgcgcaaac cctaattacg ttctgtccac gcgctaggga 60

tattcgta 70

<210> 135

<211> 70

<212> DNA

<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 135

taagatgcct gacgaaaaag tcccgtgtac ccacaacgga aagcgtgatc tagatagttc 60

ccttagcgcc 70

<210> 136

<211> 70

Mod-0037.ST25.txt

<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 136  
taattttggg ttgtcgaggc ataaactggt atgctcgctc cgctcgacga gcggttgaac 60  
gcctatcgct 70

<210> 137  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 137  
tattggccgc ggcgctaact tatatcgaga gatgtctagt ttccccaccc gttacatatt 60  
ctacggggag 70

<210> 138  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 138  
tattttccgg tactgagtgg aacgacatga agttggcggt caggtcgtta tttcgcagcc 60  
acgcaccact 70

<210> 139  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 139  
tcagatgtcg ttattaacgg gaaggatcc ggttcaactat cacggcgatt acttcgcgtt 60  
gcgaaaggc 70

<210> 140  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 140  
tccggctccg cagacggttt aactcgaacc taaaaagtcg tgtgaagcta ctgcgagacc 60  
atgcgtctt 70

<210> 141  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

Mod-0037.ST25.txt

<400> 141  
tctgttaccc acattgtcac cacttgacag ggcacggtc gtttgtaaag cgactagcta 60  
cgcaggata 70

<210> 142  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 142  
tggagatgcg aacgttggga gtatcaatcc ccggtgcaac cccctaattc gacatgccgc 60  
aagtatatat 70

<210> 143  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 143  
tgggcgccta gagccagcat attacaggcg agctgtttc gcgtctctaa tgacgtgtac 60  
gcgattctat 70

<210> 144  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 144  
tgttagacagg ggcgcgattgt atggacagt ttacgcacta accgactcta caatgttagt 60  
tttgcggc 70

<210> 145  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 145  
ttccgcatga gatcaacgcg tggtaatac gtgttaagaa ccggtcgacg ccagctagac 60  
cta atgcgtt 70

<210> 146  
<211> 70  
<212> DNA  
<213> Oligonucleotides identified according to the present invention as alien to mouse cDNA and useful for hybridization applications.

<400> 146  
tttcgactgg gggtacaaag ctcccttattt gccgttcacg aagctacata ctggtctacg 60

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gcgtgcacaa

70

<210> 147

<211> 47

<212> DNA

<213> 10 Ng of alien B was PCR amplified with a forward primer and a reverse primer

<400> 147

ttcttaatacg actcactata gggcatctat ctatgtcagt taccggc

47

<210> 148

<211> 48

<212> DNA

<213> Polymerase sequence

<400> 148

ttttttttt tttttttttt ttttctaata actgaggtga tttccgac

48

<210> 149

<211> 70

<212> DNA

<213> Alien oligonucleotides were first shown to be able to effectivley hybridize with their targets even when included spots containing other oligonucleotides.

<400> 149

ggtagacaat tcccattgca tggacaata tagtccacgc attggacgca cccaccgatg

60

gctctccaat

70

<210> 150

<211> 23

<212> DNA

<213> Anti-alien in spike control concept. Sequences of alien genes designed by linking four 70mer alien sequences together.

<400> 150

ttcttaatacg actcactata ggg

23

<210> 151

<211> 69

<212> DNA

<213> Anti-alien in spike control concept. Sequences of alien genes designed by linking four 70mer alien sequences together.

<400> 151

ccatccgggc catacgaaa tagtagcgat tgtttgcccc taccagcgaa tcgcgccag

60

ttagtaatc

69

<210> 152

<211> 70

<212> DNA

<213> Anti-alien in spike control concept. Sequences of alien genes designed by linking four 70mer alien sequences together.

<400> 152

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|  |    |
|--|----|
| taattttggg ttgtcgaggc ataaactggt atgctcgctc cgctcgacga gcggttgcac  | 60 |
| gcctatcgct   | 70 |
|  |    |
| <210> 153  |    |
| <211> 70   |    |
| <212> DNA  |    |
| <213> Anti-alien in spike control concept. Sequences of alien genes designed by linking four 70mer alien sequences together. |    |
| <400> 153  |    |
| tgccaccccc aatttgtctt ttgtccgggc caagagtacg acaacggggt attttggtag  | 60 |
| tatataccac   | 70 |
|  |    |
| <210> 154  |    |
| <211> 70   |    |
| <212> DNA  |    |
| <213> Anti-alien in spike control concept. Sequences of alien genes designed by linking four 70mer alien sequences together. |    |
| <400> 154  |    |
| gcgggctctt gtgcaaactt atggggctgg ttactcgggt gtagcacgtt ttgcgaagac  | 60 |
| tacgacagta   | 70 |
|  |    |
| <210> 155  |    |
| <211> 19   |    |
| <212> DNA  |    |
| <213> Anti-alien in spike control concept. Sequences of alien genes designed by linking four 70mer alien sequences together. |    |
| <400> 155  |    |
| aaaaaaaaaaa aaaaaaaaaa   | 19 |
|  |    |
| <210> 156  |    |
| <211> 23   |    |
| <212> DNA  |    |
| <213> Anti-alien in spike control concept. Sequences of alien genes designed by linking four 70mer alien sequences together. |    |
| <400> 156  |    |
| ttctaatacg actcactata ggg  | 23 |
|  |    |
| <210> 157  |    |
| <211> 70   |    |
| <212> DNA  |    |
| <213> Anti-alien in spike control concept. Sequences of alien genes designed by linking four 70mer alien sequences together. |    |
| <400> 157  |    |
| catctatcta tgtcagttac cggcatgggt tatggattcg tggaccgcga tgtgacgttg  | 60 |
| gggtttccac   | 70 |
|  |    |
| <210> 158  |    |
| <211> 70   |    |

Mod-0037.ST25.txt

<212> DNA  
<213> Anti-alien in spike control concept. Sequences of alien genes designed by linking four 70mer alien sequences together.

<400> 158  
tcagatgtcg ttattatcgg gaaggatcc ggttcaactat cacggcgatt acttcgcgtt 60  
gcgaaaggc 70

<210> 159  
<211> 70  
<212> DNA  
<213> Anti-alien in spike control concept. Sequences of alien genes designed by linking four 70mer alien sequences together.

<400> 159  
taattttggg ttgtcgaggc ataaactggt atgctcgctcgacga gcggttgcac 60  
gcctatcgct 70

<210> 160  
<211> 69  
<212> DNA  
<213> Anti-alien in spike control concept. Sequences of alien genes designed by linking four 70mer alien sequences together.

<400> 160  
tccgcatgcg atcaacgcgt ggtcaatacg tggtagaac cggtcgacgc cagcttgacc 60  
tactgcgtt 69

<210> 161  
<211> 20  
<212> DNA  
<213> Anti-alien in spike control concept. Sequences of alien genes designed by linking four 70mer alien sequences together.

<400> 161  
aaaaaaaaaaa aaaaaaaaaa 20

<210> 162  
<211> 69  
<212> DNA  
<213> Anti-alien in spike control concept. Sequences of alien genes designed by linking four 70mer alien sequences together.

<400> 162  
ccctctcgcc acacgttcgc tcgtttgtt gacactactg acggatcc ctctaaatac 60  
ttctctttt 69

<210> 163  
<211> 70  
<212> DNA  
<213> Anti-alien in spike control concept. Sequences of alien genes designed by linking four 70mer alien sequences together.

<400> 163

Mod-0037.ST25.txt

gttaagggtc tcgaaagatt tctactctcg acgtaccgtt ggcagcgcac taagaacggg 60  
taatgtgctg 70

<210> 164  
<211> 70  
<212> DNA  
<213> Anti-alien in spike control concept. Sequences of alien genes designed by linking four 70mer alien sequences together.

<400> 164  
tattttccgg tactgagtgg aacgacatga agttggcggt caggtcgtta tttcgagcc 60  
acgcaccact 70

<210> 165  
<211> 70  
<212> DNA  
<213> Anti-alien in spike control concept. Sequences of alien genes designed by linking four 70mer alien sequences together.

<400> 165  
cggccacaac tctcaggacg catataagac gcggaaaggc atacacgtct acttagagac 60  
accgagactt 70

<210> 166  
<211> 20  
<212> DNA  
<213> Anti-alien in spike control concept. Sequences of alien genes designed by linking four 70mer alien sequences together.

<400> 166  
aaaaaaaaaaa aaaaaaaaaaa 20